

REMARKS**I. Introduction**

The Final Action:

- objects to the drawings under 37 CFR 1.83(a);
- rejects claims 30 and 31 under 35 U.S.C. § 112, but notes that they would contain allowable subject matter if amended for the rejection and rewritten in independent form;
- rejects claims 21 and 29 under 35 U.S.C. § 102(b);
- rejects claims 1, 3-14, 16-20, 22-26, 28, and 29 under 35 U.S.C. § 103(a); and
- objects to claim 27 for depending from a rejected claim, and notes that it would be allowable if rewritten in independent form.

In this response, the Applicant:

- submits additional drawings FIGURES 7 and 8;
- amends the specification to accommodate FIGURES 7 and 8;
- amends claims 1, 5, 7, 9, 10, and 22-31;
- cancels claims 11 and 21; and
- traverses the remaining 35 U.S.C. § 103(a) rejections.

The Applicant has amended the drawings to include FIGURES 7 and 8. A copy of the new formal drawings are included with this response. The amendments to the specification are submitted solely for the purpose of accommodating the additional drawings. No new matter has been added.

Addressing each of the Examiner's objective in turn:

- "At least one additional high resolution sensor array," is depicted, among other places, in FIGURES 1, 7, and 8.
- "Plurality of said high resolution one dimensional sensor array," is depicted in, among other places, FIGURES 7 and 8.

- “Moving each sensor array.,” is depicted in, among other places, FIGURES 7 and 8.
- “Through a portion of the second dimension,” is depicted in, among other places, FIGURES 7 and 8.
- “Exclusive of at least one other sensor,” is depicted in, among other places, FIGURES 7 and 8.
- “Linearly moving each sensor array through a second dimension,” is depicted in, among other places, FIGURES 7 and 8.
- “First array is located at one end of the image plane and second array is located in the middle,” is depicted in, among other places, FIGURE 7.
- “First array and second array are located in the middle of said image plane,” is depicted in, among other places, FIGURE 8.
- “Converting light into digital image data is performed at different rates at different points during travel,” is depicted in, among other places, FIGURES 1, 7, and 8.
- “Variable Sample rate,” is depicted in, among other places, FIGURES 1, 7, and 8.
- “Changing Sampling rate,” is depicted in, among other places, FIGURES 1, 7, and 8.
- “Increasing the sampling rate,” is depicted in, among other places, FIGURES 1, 7, and 8.
- “Moved at variable velocity,” is depicted in, among other places, FIGURES 1, 7, and 8.
- “Increasing the variable velocity,” is depicted in, among other places, FIGURES 1, 7, and 8.

The Applicant respectfully submits that these amendments fully traverse the outstanding objections to the drawings, and respectfully asks the Examiner to withdraw the objections.

Claims 30 and 31 have been amended to cure a typographical error and to expressly contain the limitations of claim 21, their former base claim. In addition, they have been amended to now appear in independent form. No new matter has been added. The Applicants respectfully request that the Examiner designate claims 30 and 31 as allowed.

Claim 27 has been rewritten in independent form. No new matter has been added. The Applicant respectfully requests that the Examiner designate claim 27 as allowed.

Claims 22 – 26, 28, and 29 have been amended to now depend from claim 30. Claim 1 has been amended to include the limitations of claim 11. Claims 5, 7, 9, and 10 have been amended to grammatically conform with their now amended base claim. Claims 11 and 21 have been canceled. No new matter has been added.

Claims 1 – 10, 12 – 14, 16 – 20, and 22 – 31 remain pending in this application. In light of the remarks contained herein, the Applicants respectfully assert that all pending claims are in condition for allowance.

II. Improper Finality

In the Office Action dated August 14, 2003, claim 2 was rejected under 35 U.S.C. § 102(b). In the Response dated November 14, 2003, the Applicant amended claim 1 to include the limitations of claim 2, and canceled claim 2. In this Final Action, claim 1 is now rejected under 35 U.S.C. § 103(a). The Applicant respectfully reminds the Examiner that a second Action on the merits should not be made Final when the Examiner introduces a new ground of rejection not necessitated by amendment, whether or not the art reference is already of record. See M.P.E.P. § 706.07(a). Because claim 1 contains only those limitations that were previously contained in claim 2, rejecting claim 1 under 35 U.S.C. § 102 is in fact a new ground for rejection of that subject matter that is not necessitated by an amendment. Thus the finality of the Final Action is improper. The Applicant respectfully asks the Examiner to withdraw that finality.

III. Additional Issues

Claims 30 and 31 were rejected under 35 U.S.C. § 112, second paragraph. The basis for these rejections, namely that there is a lack of antecedent basis for a claim limitation, has been rendered moot by the amendments to claims 30 and 31. The Applicant respectfully asks that the Examiner withdraw this rejection.

Claims 21 and 29 are rejected under 35 U.S.C. § 102(b). Claim 21 has been canceled and claim 29 now depends from allowable claim 30. The Applicant respectfully submits that the rejection to claim 21 is now moot. The Applicant further respectfully asserts that claim 29 is now allowable, and asks the Examiner to withdraw the rejection.

IV. Rejections Based on 35 U.S.C. § 103(a)

Claims 1, 3 – 14, 16 – 20, 22 – 26, 28, and 29 were rejected under 35 U.S.C. § 103(a). As stated in prior papers, a *prima facie* case of obviousness must satisfy three basic criteria. First, the combination or modification cited must teach or suggest all the limitations in the rejected claim. Second, there must be some suggestion for the combination or modification found in either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Third, the combination or modification must have inspired a reasonable expectation of success. *See* M.P.E.P. § 2143. Without conceding that any of the remaining criteria are met, the Applicant respectfully submits that each rejection in the Final Action fails to cite a combination or modification that teaches or suggests all the limitations of the claims rejected.

Claim 1 was rejected as obvious over *Mutze* (DE 4100400 A1) (hereinafter *Mutze*) in light of *Stern et al.*, U.S. Patent No. 6,370,339 (hereinafter *Stern*). Claim 1 now contains the limitations previously contained in claim 11. Because claim 11 was rejected as obvious in further light of *Kawamoto et al.*, U. S. Patent No. 5,920,063 (hereinafter *Kawamoto*), the Applicant will discuss the combination of *Mutze*, *Stern*, and *Kawamoto* as it applies to the current limitations of claim 1.

Claim 1 recites “a plurality of high resolution sensor arrays ... moved through only portions of said second dimension.” The Final Action concedes that neither *Mutze* nor *Stern* disclose this limitation, but cites column 1, lines 41 – 52 of *Kawamoto* as curing this defect. However, as FIGURE 2 of *Kawamoto* illustrates, each sensor array in *Kawamoto* is designed

to scan only its specific sub-set of lines. Because each line of the image is scanned by only one array, each array is required to scan through the entirety of the second dimension. The arrays of *Kawamoto* are, therefore, unable to move “through only portions of said second dimension.” Because *Kawamoto* does not teach every limitation of claim 1, and the Applicant respectfully asks the Examiner to withdraw the rejection.

Claims 3 – 10 depend either directly or indirectly from claim 1, and thus inherit all of its limitations. Claims 3 – 10, therefore, inherit limitations neither taught nor suggested by the combinations cited, and the Applicant respectfully asks the Examiner to withdraw the rejections.

Claim 12 recites “deploying a plurality of said high resolution one dimensional sensor arrays ...[and] moving each sensor array... through a portion of the second dimension.” The Final Action again concedes that its proposed combination of *Mutze* and *Stern* fails to disclose this limitation. To cure the defect, the Examiner adds *Kawamoto* and opines that it teaches “moving each of said plurality of said high resolution sensor array through a portion of the second dimension.” The Applicant respectfully asserts that this reading of *Kawamoto* is mistaken. As FIGURE 2 and column 1, lines 41 – 52 of *Kawamoto* illustrate, each sensor array is specifically designed to scan a specific subset of image lines. Thus, each array is required to scan through the entire second dimension, and could not perform as *Kawamoto* intended if moved through only a portion. The combination of *Mutz*, *Stern*, and *Kawamoto* does not, therefore, teach or suggest all of the limitations in claim 12, and the Applicant respectfully asks the Examiner to withdraw the rejection.

Claims 13, 14, and 15 – 20 depend either directly or indirectly upon claim 12, and thus inherit all of its limitations. Claims 13, 14, and 16 – 20, therefore, inherit limitations not taught by the combinations cited, and the Applicant respectfully asks that the Examiner withdraw the rejections.

Claims 30, now in independent form, is allowable according to the Final Action. Claims 22 – 26, 28, and 29 depend, either directly or indirectly, on allowable claim 30. The Applicant respectfully requests that the Examiner withdraw the now moot rejections of claims 22 – 26, 28, and 29.

V. Summary

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

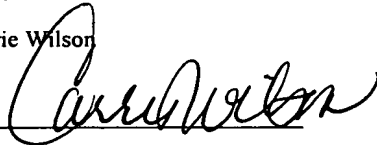
The Applicant believes that a fee of \$172.00 is due with this response. Please charge Deposit Account No. 08-2025, under Order No. 10980689-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV482735934US, in an envelope addressed to: M/S AF, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Date of Deposit: April 2, 2004

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